NGUYEN Quang-Duy

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Education

2017 - 2020 PhD in Computer Science

École Doctorale des Sciences Pour l'Ingénieur, University Clermont-Auvergne, France UR TSCF, MathNUM departement, INRAE (Irstea), Clermont-Ferrand, France *PhD defense : 16/07/2020*

2014 – 2015 Master 2 in Networks and Communicating Systems

University Claude Bernard Lyon I, France

Note: 15.31/20.00 - Rank: 1/60

2013 – 2014 Master 1 in Computer Science

Institute Francophone for Information Technology (IFI), Hanoi, Vietnam

Note: 14.20/20.00

2007 – 2012 Engineer of Information Technology in Computer Engineering

Hanoi University of Science and Technology, Vietnam

Note: 14.96/20.00

Experience

12/2021 – present **Postdoctoral Researcher**

LSEA laboratory, CEA List, Palaiseau, France

Project: Tools and methods for system complex engineering in Industrie 4.0 Keywords: Industrie 4.0, CPS, OPC UA, AAS, Eclipse Papyrus, ROS

10/2020 - 09/2021 Postdoctoral Researcher

LTCI laboratory, Télécom-Paris, Palaiseau, France

Project : OPC-UA PubSub for Caméléon

Keywords: Industrie 4.0, IIoT, SNCF, OPC UA, PubSub, Embedded System, Zephyr OS, C

01/2017 - 07/2020 **PhD Student**

UR TSCF, MathNUM departement, INRAE

Project : ConnecSens, AgroTechnoPôle

Keywords: Agriculture, IoT, Ontology, Reasoning, Decision Support, OWL, SWRL, Python

08/2016 - 10/2016 Research Engineer

Programmation, Networks and Systems team, LaBRI laboratory, Bordeaux, France

Project : Le Palais de la Mémoire

Keywords: Sounds, Method of Loci, Distributed Algorithms, Beacons, BLE, Android

04/2015 - 07/2016 Master 2 Intern / Research Engineer

Networks team, ICube laboratory, Strasbourg, France

Project : FIT/IoT-lab

Keywords: Multihoming, Mobility, Contiki, TelosB, Python, C/C++

Institute Francophone for Information Technology

Project : Modeling and diffusion of mobile users profile

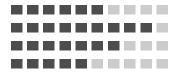
Keywords: Participative Detection, Modeling, Android, GAMA Platform, GAML

Publications*

- [CI.3] **Quang-Duy Nguyen**, Catherine Roussey, Patrick Bellot, Jean-Pierre Chanet, "Stack of Services for Context-Aware Systems: An Internet-Of-Things System Design Approach", IEEE RIVF 2021, 12/2021
- [JI.2] Julian Eduardo Plazas, Sandro Bimonte, Christophe de Vaulx, Michel Schneider, **Quang-Duy Nguyen**, Jean-Pierre Chanet, Hongling Shi, Kun Mean Hou and Juan Carlos Corrales, "A Conceptual Data Model and its Automatic Implementation for IoT-Based BI Applications: UML Profile and MDA Approach", IEEE Internet of Things Journal, 10/2020
- [T.1] **Quang-Duy Nguyen**, "Interoperability and Upgradability Improvement for Context-Aware Systems in Agriculture 4.0", PhD thesis, University Clermont-Auvergne, 07/2020
- [CF.2] **Quang-Duy Nguyen**, Catherine Roussey, Maria Poveda-Villalón, Christophe de Vaulx, Jean-Pierre Chanet and Camille Noûs, "CASO et IRRIG deux ontologies pour le développement de systèmes contextuels : cas d'usage sur l'automatisation de l'irrigation", IC 2020, 07/2020.
- [JI.1] **Quang-Duy Nguyen**, Catherine Roussey, Maria Poveda-Villalón, Christophe de Vaulx and Jean-Pierre Chanet, "Development Experience of a Context-Aware System for Smart Irrigation using CASO and IRRIG ontologies", Special Issue "Semantic Technologies Applied to Agriculture", MDPI Applied Science, 2020.
- [CI.2] Maria Poveda-Villalón, **Quang-Duy Nguyen**, Catherine Roussey, Christophe de Vaulx and Jean-Pierre Chanet, "Ontological Requirement Specification for Smart Irrigation Systems: A SOSA/SSN and SAREF Comparison", ISWC 2018, 10/2018.
- [CF.1] Maria Poveda-Villalón, **Quang-Duy Nguyen**, Catherine Roussey, Christophe de Vaulx and Jean-Pierre Chanet, "Besoins ontologiques d'un système d'irrigation intelligent : Comparaison entre SSN et SAREF", IC 2018, 07/2018.
- [CI.1] **Quang-Duy Nguyen**, Julien Montavont, Nicolas Montavont and Thomas Noël, "RPL Border Router Redundancy in the Internet of Things", Adhoc-Now 2016, 07/2016.



Project Management System Implementation Scientific Writing Presentation



Linguistic

Technical Skills

Development Process Operating System Network Protocol Ontology Mini-Waterfall, LOT, Agile Linux, Zephyr, Contiki, Android TCP/IP, OPC UA PubSub, RPL SOSA/SSN, CASO Protégé, GIT, Latex, Wireshark

Programming

C/C++

Java

Python

Shell script

Querry language

References

- **Prof. Patrick BELLOT**, Director of CCN team, LCTI laboratory, Télécom-Paris *Project manager of the project "OPC-UA PubSub for Caméléon"*☑ patrick.bellot@telecom-paris.fr
- **Dr. Jean-Pierre CHANET**, Director of UR TSCF, MathNUM departement, INRAE

 Director of the thesis "Interoperability and Upgradability Improvement for Context-Aware Systems in Agriculture 4.0"

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